What is claimed:

1. A vaso-occlusive device, comprising:

an occlusive member having a lumen; and

an active element carried in the lumen, wherein the active element expands or contracts when placed in a body to thereby cause the occlusive member to substantially retain its shape when deployed in a body cavity.

2. The vaso-occlusive device of claim 1, wherein the active element is secured to the occlusive member.

3. The vaso-occlusive device of claim 2, wherein the active element is secured to the occlusive member by an adhesive.

4. The vaso-occlusive device of claim 2, the occlusive member having first and second ends, wherein the active element is secured at one or both ends of the occlusive member.

5. The vaso-occlusive device of claim 2, wherein the active element is secured at one or more locations along a length of the occlusive member.

6. The vaso-occlusive device of claim 1, wherein the active element comprises a hydrogel.

7. The vaso-occlusive device of claim 6, wherein the hydrogel comprises a homopolymer, copolymer, network polymer, or some combination or sub-combination thereof.

8. The vaso-occlusive device of claim 7, wherein the hydrogel comprises one or more of polyethylene glycol, polypropylene glycol, polyvinyl alcohol, polyvinylpyrrolidone, polyacrylates, polymethacrylates, polyacrylamides and polyehyloxazoline.

9. The vaso-occlusive device of claim 8, wherein the hydrogel further comprises one or more chemical cross-linking agents.

10. The vaso-occlusive device of claim 7, wherein the hydrogel comprises one or more of polysaccharides, mucopolysaccharides, polyaminoacids, carboxy alkyl celluloses, partially oxidized cellulose, hyaluronic acid, dextran, heparin sulfate, chondroitin sulfate, heparin, agar, starch, alginate, fibronectin, gelatin, collagen, fibrin, pectins, albumin and ovalbumin.

11. The vaso-occlusive device of claim 10, wherein the hydrogel further comprises one or more chemical cross-linking agents.

12. The vaso-occlusive device of claim 7, wherein the hydrogel comprises one or more polyester of alpha-hydroxy acids including polyglycolic acid, poly-DL-lactic, poly-L-lactic acid, polylactones, polyanhydrides, polyorthoesters, polydioxanone, polycaprolactones, poly(delta-valerolactone), and poly(gamma-butyrolactone).

13. The vaso-occlusive device of claim 12, wherein the hydrogel further comprises one or more chemical cross-linking agents.

14. The vaso-occlusive device of claim 1, wherein the active element has an elongate shape.

15. The vaso-occlusive device of claim 1, wherein the occlusive member is a coil.

16. The vaso-occlusive device of claim 15, wherein the active element has a coil shape.

17. The vaso-occlusive device of claim 1, wherein the active element expands when placed in the body, and when in the body, may be expanded to have a cross-sectional dimension that is at least 100% of an internal diameter of the occlusive member.

18. The vaso-occlusive device of claim 16, wherein the active element, when in the body, may be expanded to have a cross-sectional dimension between 100% and 200% of the internal diameter of the occlusive member.

19. The vaso-occlusive device of claim 1, wherein the active element comprises a shape memory alloy.

20. The vaso-occlusive device of claim 1, wherein the active element comprises a shape memory polymer.

21. The vaso-occlusive device of claim 6, wherein the hydrogel is thermoresponsive.

22. The vaso-occlusive device of claim 6, wherein the hydrogel comprises a polyelectrolyte.

23. The vaso-occlusive device of claim 22, wherein the polyelectrolyte undergoes an ionic concentration induced shape change at or near the ionic concentration present in blood plasma.

24. The vaso-occlusive device of claim 1, wherein the active element is a fiber comprising protein.

25. The vaso-occlusive device of claim 24, wherein the fiber comprising protein undergoes a thermally induced phase transition or denaturation at or near body temperature.

26. The vaso-occlusive device of claim 24, wherein the fiber comprising protein undergoes a pH induced phase transition or denaturation at or near body pH.

27. The vaso-occlusive device of claim 1, wherein the active element is a polymer gel comprising a biocompatible polymer swollen with a non-aqueous solvent that will diffuse out of the gel upon contact with blood.

28. The vaso-occlusive device of claim 1, wherein the active element expands or contracts within about forty-eight hours after being placed in a body.

29. The vaso-occlusive device of claim 28, wherein the active element expands contracts within about ten to twenty minutes after being placed in a body.

30. A vaso-occlusive device, comprising:

a coil having a lumen; and

a hydrogel carried in the coil lumen, wherein the active element expands after being placed in a body vasculature site, such that the coil substantially retains its shape when deployed in a body cavity.

31. The vaso-occlusive device of claim 30, wherein the hydrogel is substantially swollen with an aqueous ionic solution, such that ions will diffuse into or out of the gel upon contact with blood.

32. A vaso-occlusive device, comprising:

a coil having a lumen; and

an active element carried in the coil lumen, wherein the active element contracts after being placed in a body vasculature site, such that the coil substantially retains its shape when deployed in a body cavity.

33. The vaso-occlusive device of claim 32, wherein the active element comprises a shape memory alloy or polymer.

34. The vaso-occlusive device of claim 32, wherein the active element comprises a hydrogel.

35. The vaso-occlusive device of claim 34, wherein the hydrogel is one or both of a polyelectrolyte and thermoresponsive.

36. The vaso-occlusive device of claim 32, wherein the active element is a fiber comprising protein.

37. The vaso-occlusive device of claim 36, wherein the fiber comprising protein undergoes one or both of a thermally induced and pH induced phase transition or denaturation after being placed in the body.

38. The vaso-occlusive device of claim 32, wherein the active element is a polymer gel comprising a biocompatible polymer swollen with a non-aqueous solvent that will diffuse out of the gel upon contact with blood.

39. The vaso-occlusive device of claim 32,. the active element comprising a biocompatible polymer substantially swollen with an aqueous ionic solvent, such that ions will diffuse in to or out of the gel upon contact with blood.

40. A vaso-occlusive device, comprising an occlusive member having a lumen; and an active element carried in the lumen, wherein the active element expands or contracts when placed in a body to thereby stiffen the occlusive member.